Iowa Legislative Fiscal Bureau

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State Capitol Des Moines, IA 50319 October 25, 2001

Cattle Feedlots

ISSUE

This *Issue Review* provides an overview of the permit requirements for owners and operators of open cattle feedlots and the implementation progress in lowa.

AFFECTED AGENCIES

Department of Natural Resources

CODE AUTHORITY

Chapter 455B, Code of Iowa

BACKGROUND

In 1972, the federal Environmental Protection Agency (EPA) began regulation of water pollutants under the federal Clean Water Act. The Iowa Department of Natural Resources was authorized to issue National Pollutant Discharge Elimination System (NPDES) permits to concentrated animal feeding operations as defined by the EPA. This includes operations that have more than 1,000 animal units or an operation with more than 300 animal units but less than 1,000 animal units and discharges waste through a drainage ditch, flushing system, or some other man-made system connected to public waters. An animal unit is a measurement based on manure production of various types of animals. A cattle operation that has 1,000 animal units would have at least 1,000 beef cattle or 700 dairy cattle.

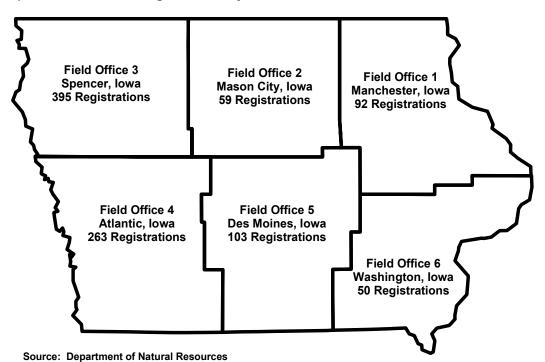
The federal Clean Water Act requires each state to establish water quality standards and to submit a list of waterbodies that do not meet the standards every two years. Waterbodies not meeting the standards are considered to be impaired. In 1998, the National Water Quality Inventory reported that 40.0% of the country's assessed waterbodies were impaired. The Inventory also reported that 60.0% of the impaired rivers and streams and 30.0% of the impaired lakes were due to agriculture sources such as livestock waste. In 1999, the EPA and United States Department of Agriculture developed the Unified National Strategy that included changing requirements for NPDES permits to minimize the impact of animal feeding operations on water quality.

CURRENT SITUATION

State of Iowa

Currently, the Department has issued 24 NPDES permits to open cattle feedlot operators in the State and has an additional 11 in the review process. The Department estimates there are at least 300 open cattle feedlots that would require a permit. The Department has worked with the EPA and other organizations to develop an implementation program that would be completed in five years. This includes producer registration with the Department, an environmental assessment of the producers, and issuance of NPDES permits to producers required to have one. Producers in operation as of April 1, 2001, can register with the Department until January 2, 2002, without being penalized for not having a permit. This does not include operations that have a pending notice of violation, have been issued an Administrative Order prior to December 1, 2000, or have reported water quality violations. Operations that register will not be inspected by the Department until 2001 unless a violation is reported.

As of October 2, 2001, 965 producers have registered with the Department. Of the 965 producers, 159 operations have more than 1,000 animal units, 515 have between 300 and 1,000, and 291 have fewer than 300. The following map illustrates the geographic distribution of the producers. (Three of the registrations did not list the county location).



Open Cattle Feedlot Registrations by Field Office - As of October 2, 2001

An in-house Environmental Priority Assessment will be completed by the Department on all registrations using a point allocation system for the following criteria:

- Number of animal units
- Topography

- Distance between operations runoff to surface waterbodies
- Feedlot drainage areas
- Classification of surface water
- Evaluation of direct conduits to surface water or groundwater
- Soil type

Currently, the Department has completed 202 in-house Environmental Priority Assessments. The following table identifies the level of priority of the plans received:

Priority Level	Plans Received	Percent to Total
High	55	27.3%
Medium	52	25.7%
Low	95	47.0%
Total	202	100.0%

The Department plans to complete on-site assessments of the high priority operations and to issue permits within a two-year period. The on-site assessment will review and verify the information submitted to the Department and include a review of site conditions, management practices, and a determination of whether a permit is required.

The Department developed rules for the Concentrated Animal Feeding Operation Registration Program that received approval by the Environmental Protection Commission on August 20, 2001. The Program rules will be added to Chapter 455B, <u>Code of Iowa</u>. The rules are listed at http://www.state.ia.us/dnr/organiza/epd/wastewtr/feedlot/0601expl.pdf.

Proposed Federal Program

On January 12, 2001, the EPA published proposed regulations to the NPDES permit program and the Effluent Guidelines for concentrated animal feeding operations (CAFO). Effluent Guidelines set discharge limits for CAFOs that have a NPDES permit. The proposed regulations:

- 1. Define the difference between an Animal Feeding Operation (AFO) and a Concentrated Animal Feeding Operation (CAFO).
- 2. Provide two definitions for a CAFO.
 - a. The first definition has three categories and requires a NPDES permit for operations with more than 1,000 animal units. Operations with 300 to 1,000 animal units may be required to obtain a permit or certify that the operation does not meet the criteria necessary for a permit. An operation is also required to have a permit when the permit authority designates the operation as a CAFO.

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- b. The second definition has two categories and requires a NPDES permit for operations with 500 animal units or more. The remaining operations would only require a permit if directed to do so.
- 3. Address land application of manure. Requires CAFOs to submit a site-specific permit nutrient plan prepared by a certified planner that addresses feed management, manure storage and handling, land application of manure, and land management. Land application rates would be based on phosphorus levels.
- 4. Specifies the Effluent Guidelines are applicable to all CAFOs. Requires operators to certify there is no connection between the groundwater located under the CAFO operation to the surface water. If a connection exists, the operator must monitor groundwater for ammonia, nitrate, fecal coliform, total coliforms, total chlorides, and total dissolved solids.

For more information regarding the proposed regulations, review the EPA's fact sheet located on the Web at http://www.epa.gov/npdes/pubs/CAFO-brochure3.pdf.

Public comment was received until July 30, 2001, and final action is scheduled for December 15, 2002. Operations requiring NPES permits will have until January 2006 to obtain them.

BUDGET IMPACT

The Department of Natural Resources has assigned a field office employee to implement the Open Cattle Feedlot Program. Other employees that work in the Animal Feeding Operations area work on the Program on a part-time basis. The Department estimates it will take five years to implement the Program. Depending on the proposed federal regulations, the State of Iowa may be required to issue up to an additional 3,500 NPDES permits. This would increase expenditures for FY 2003, as the final rule will not be released until December 2002. Additional employees would be needed for on-site inspections and to review and approve NPDES permits.

The Senate passed Senate File 503 (Open Feedlot Registration) during the 2001 Legislative Session, which addressed registration of open cattle feedlots and establishment of a cost share fund to assist owners with manure containment practices. The estimated cost for total containment of manure was \$75.0 to \$110.0 per head of cattle and the estimated cost for manure removal was \$13.0 to \$37.0 per head of cattle. Based on 300 operations, a 75.0% cost share fund for total containment of manure would range from \$17.0 to \$173.0 million. Based on 300 operations, a 50.0% cost share program for manure removal would range between \$2.0 and \$39.0 million.

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http://staffweb.legis.state.ia.us//lfb/IRVIEW/irview.htm

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